UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/769,698	01/30/2004	Zong-Qiu Su	USP2335C-DRSH	8608
30265 7590 01/26/2007 RAYMOND Y. CHAN			EXAMINER	
	AVE., SUITE 128		MULCAHY, PETER D	
MONTEREY PARK, CA 91754			ART UNIT	PAPER NUMBER
			1713	
	· · · · · · · · · · · · · · · · · · ·			
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MO	NTHS	01/26/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)			
	10/769,698	SU, ZONG-QIU			
Office Action Summary	Examiner	Art Unit			
	Peter D. Mulcahy	1713			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a cause the application to become ARANDONE.	N. nely filed the mailing date of this communication.			
Status					
1) Responsive to communication(s) filed on 23 C	October 2006.				
_	s action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposition of Claims					
4) Claim(s) <u>27-49</u> is/are pending in the applicatio 4a) Of the above claim(s) <u>46-49</u> is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) <u>27-45</u> is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or	vn from consideration.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.	epted or b) objected to by the Education of the Education of the drawing (s) be held in abeyance. See tion is required if the drawing (s) is objected to be a second or better the drawing (s) is objected to be a second or better the drawing (s) is objected to be a second or better the drawing (s) is objected to by the Education of the drawing (s) is objected to by the Education of the Education	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list 	s have been received. s have been received in Application rity documents have been received u (PCT Rule 17.2(a)).	on No ed in this National Stage			
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	nte			
	ction Summary Pa	rt of Paper No./Mail Date 20070120			

Application/Control Number: 10/769,698

Art Unit: 1713

DETAILED ACTION

Page 2

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 27-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagiwara et al. US 6,878766.
- 3. The rejection set forth under 35 USC 103 in the paper mailed 3/24/06 is deemed proper and is herein repeated. The newly presented claims and remarks filed in support thereof have been fully considered and fail to obviate the rejection.

Application/Control Number: 10/769,698

Art Unit: 1713

Response to Arguments

Page 3

4. Applicants argue that the alleged differences (a)-(p) are unobvious and that the claims are patentable over the cited references. These alleged differences do not support the patentability of the claimed invention for at least the following reasons:

- (a). The use as isoprene is obvious from this disclosure. Column 2 line 61 clearly identifies isoprene. The fact that 1,3-butadiene is used in the examples does not render isoprene any less obvious. The disclosure is not limited by the examples and is understood for what it reasonably teaches. One of ordinary skill is directed to use of isoprene. One of ordinary skill further understands the difference between isoprene and 1,3-butadiene. As such, isoprene is obvious.
- (b). The copolymerization with the claimed monomers is taught at column 3 lines 60-64.
- (c). The preparation of the aqueous emulsion using a free radical system is conventional, extensively discussed at column 5 lines 1+ and shown in the examples.
- (d). The incorporation of the acid monomers claimed is taught at column 3 lines 40+.
- (e). The process steps of charging, reacting, adding and reacting read on a continuous polymerization process which is conventional and is described at column 5 lines 53-60 and column 6 lines 1+ and shown in the examples.
- (f). The use of emulsifiers is conventional and described at column 4 line 58-60. The emulsifier species claimed are conventional and described in this paragraph as well.

Application/Control Number: 10/769,698

Art Unit: 1713

(g). The claimed amount of emulsifier is conventional and described at column 4 lines 60-63.

Page 4

- (h). The claimed redox initatior system is conventional and described at column 4 line 64 to column 5 line 29.
- (i). The use of a "co-reductant" and the species of reducing agent reads on the species of reducing agents are conventional and identified at column 5 lines 17-21. The complexing agent and precipitating agents claimed are conventional and described in the paragraph cited supra as well as the examples.
- (j). The claimed vulcanization auxiliaries are conventional and described at column 6 lines 50+, as well as the examples.
- (k). The coagulant is conventional and discussed at column 7 lines 55+, as well as the examples.
- (I). The drying step is conventional and taught at column 8 lines 20-24, as well as the examples.
- (m). Moot, as claim 46 is withdrawn per the restriction requirement and election in response thereto.
- (n). Moot, as claim 47 is withdrawn per the restriction requirement and election in response thereto.
- (o). Moot, as claim 48 is withdrawn per the restriction requirement and election in response thereto.
- (p). Moot, as claim 49 is withdrawn per the restriction requirement and election in response thereto.

Art Unit: 1713

Election/Restrictions

4. Claims 46-49 stand withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 10/23/06.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter D. Mulcahy whose telephone number is 571-272-1107. The examiner can normally be reached on Mon.-Fri. 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

. **J**

Application/Control Number: 10/769,698

Art Unit: 1713

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000,

Peter D. Mulcahy Primary Examiner Art Unit 1713 Page 6

1/20/07